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OLD PHYSIC AND YOUNG PHYSIC:

SOME OF THE CHANGES OF THE PAST HALF CENTURY
CONTRASTED AND COMPARED,

AND

THEIR ADVANTAGES ESTIMATED.

THE

ANNUAL ADDRESS

BEFORE THE

MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.

BY

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PRESIDENT.



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OLD PHYSIC AND YOUNG PHYSIC.

GENTLEMEN OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA, AND
LADIES AND GENTLEMEN :—

ONE year ago, at the meeting of the State Medical Society at Easton, a discussion on the "Report on Obstetrics" sprung up among the senior members of the profession in reference to a therapeutical point, which excited considerable interest, and which brought into direct contrast the practice of the past with that of the present day. This discussion was on the subject of bleeding in puerperal convulsions, and was chiefly participated in by Atlee of Lancaster, Gross of Philadelphia, Corson of Montgomery, Bruce of Allegheny, and myself, all—so far as years may be considered—old fogies in the profession. The incident here referred to has furnished a valuable hint to me in selecting a theme for the annual address on this occasion, viz. :—

OLD PHYSIC AND YOUNG PHYSIC: *some of the changes of the past half century contrasted and compared, and their advantages estimated.*

Before the invasion of our country by cholera in 1832, and in a less degree up to its return in 1849, the lancet was one of the great powers of the practitioner. Every disease of an inflammatory character, or marked by much vascular excitement, and fevers in their incipient stage, were at once subjected to the lancet. The rule in bleeding was to place the patient in an upright position, make a large opening in the vein, draw a full stream of blood, allow it to flow until approaching or complete syncope supervened, then arrest it, and lay the patient down. Such a proceeding would often be followed by the most astonishing results, and the relief of symptoms would not only be prompt, but frequently permanent. The blood drawn would then be set aside, giving it time to become separated into crassamentum and serum, and saved until the next

visit of the physician, when he would examine it. If the clot was found to be even and not discolored, he would bleed no more. But if "cupped" and covered with the corium phlogisticum or "buffy coat," and the symptoms continued to be more or less severe, he would repeat the venesection once or oftener until he had the disease under control.

At that early day every physician, without a single exception, carried a spring-lancet in his pocket, and daily used it. Now, the exception and the practice are diametrically reversed. Let me test it: every gentleman having a spring-lancet will please hold it up to view. I appoint Dr. Atkinson teller. How many? Answer, five. Here is demonstration strong as "Holy Writ." What a change within even a quarter of a century has overtaken our therapeutics!

It was also the practice for every female during the period of gestation to be bled, by the advice of her physician, once or oftener as a precautionary measure; and during parturition, when the pulse was full and tense, accompanied with pain in the head and cerebral congestion, it was never omitted. What statistics might say on the subject I do not know, but I am of the opinion that puerperal eclampsia was less frequent, on this account, in the practice of old physic than it is in the present day; and that if young physic were guided by the experience of his fathers, this dreadful phase of female suffering and mortality would be diminished, and humanity would be the gainer.

Until the third or fourth decade of the present century the sentiment of the people was in full harmony with the practice of the profession; for it was a common occurrence, particularly among the Germans, for persons to call at the doctor's office (with their red worsted bandage nicely rolled up and pinned), to be bled every spring and fall, even in the best condition of health and upon their own responsibility. After losing a pint or so of blood, they would follow this operation by taking *das bluit reiniger* or "blood purge," to ward off the diseases of the ensuing season. Some sign in the zodiac or a certain phase of the moon was invariably selected for carrying out this important hygienic measure. Whatever may have been the physical effects of this treatment, there could be no doubt of the mental satisfaction that resulted from it. Those, who were troubled with rheumatic pains in the back and limbs, or with amenorrhœa and other uterine troubles, would select to be bled in the foot. After tying a roller round the ankle, the foot was placed in a tub of hot water until the veins would become turgid, when the click of the lancet would be followed by the living stream. Dryden refers to this practice as common in his day:—

"The ready cure to cool the raging pain,
Is underneath the foot to breathe a vein."

To carry out fully this antiphlogistic treatment, as it was named, the bleeding was often followed by an efficient emetic of tartarized antimony, and subsequently by very active purgation by calomel, alone or combined; and the diet was absolute. If the disease proved obstinate and did not succumb to this treatment, smaller doses of antimony and calomel, with opiates at night, would necessarily follow, and be continued until mild ptyalism, or even profuse salivation was induced. Blisters to the arms, legs, abdomen, and other parts were employed as adjuvants, the detached cuticle was peeled off, and the raw surface dressed with strong mercurial ointment, while mercurial inunction would be assiduously made in other portions of the body. I can look back on this heroic course of treatment, and while I believe that much of it was unnecessary, I still think that the practice of the present day, though more humane, can claim no greater success.

It was during this positive practice in the treatment of disease, that patients were forbidden to use certain agents of the most grateful nature. No matter how intense the desire, or how high the fever raged, cold water and ice were denied to the craving sufferer. Mercurials and cold water were considered fatally incompatible. Now and then, however, patients would become desperate, and, in the absence of the nurse, would rush to the bucket and drink freely of the refreshing and life-giving fluid, and yet would not only outlive the rash deed, but be improved by its recuperative powers. How different now! The parched tongue, the fevered lips, the throbbing temples, the burning skin are supplied *ad libitum* with that blessed life-giving and refreshing influence.

After the cholera invasion of 1832, it began to be suspected that the vigor of the human constitution had diminished; that the type of disease had altered; that if diseases were not less inflammatory, antiphlogistic treatment was at least less tolerated; and that active and large doses of medicine were more prostrating. Whether or not these opinions were based upon correct data, the fact was that a gradual change in therapeutics took place, and that soon after the recurrence of cholera in 1849, the old plan of treatment was almost totally abandoned, and a new fashion sprung up, entirely antagonistic in its character. The lancets of old are now rusting in blood stains among the rubbish of some unused corner, while young physis, intoxicated with new ideas, ignores the practice of his ances-

tors and even grapples with inflammations armed with brandy, old bourbon, quinine, and the like.

Is it true that the vital powers of the human race have lost in force; that the type of disease has changed and become less sthenic; that our physical condition is less tolerant of active measures; or, is it in medicine, as in many other things, that *fashions have changed*?

Amidst all the improvements of modern therapeutics, it is very questionable whether the discontinuance of the lancet be one of them, and whether young physic, without it, has been as successful in the treatment of acute diseases as was old physic with it. As I am one of the old fogies, who lived during the bloody reign of Sangrado, I may be more or less prejudiced; but were I to choose between the two remedies—the *old* and the *new*—in the treatment of inflammatory troubles, I would much prefer the lancet to the brandy bottle. Of the two agents—as representative of two opposing plans of treatment—I believe the latter has done the least good and the most harm. When summoned to a suffering patient, who, having passed through a severe chill, was in a blaze of heat; with a hot dry skin; full, tense, and rapid pulse; his head bursting with pain; eyes protruding and blood-shot; respiration labored and frequent, with agony at every breath; old physic used to relieve all these symptoms in a few moments by taking off the great tension of the system by a decided and prompt bloodletting.

It is very true that before the first introduction of cholera into this country venesection was often carried to too great an extent, and employed in diseases unsuited to it, because it was *then the fashion*—while now it is almost entirely ignored, because it is *not the fashion*. Were young physic to go back to the practice of a period comprised between the end of the third and the beginning of the fifth decade of this century—when the lancet was being employed with more moderation, and confined more to acute inflammations and to the early stages of disease—he would meet his older brother half way, in that happy medium between the two extremes, where, in truth, the foundation of all science, is apt to dwell. I am well persuaded that the disuse of the lancet is a great loss as a means of cure. In all acute inflammatory disorders, in sudden congestion of vital organs, in all cases of phlethoric convulsions, bleeding to approaching syncope, as was the practice years ago, is followed by more prompt beneficial results than can be expected from any other agent. And in local and subacute inflammations, topical bleeding and blistering, which, I am happy to say, still survive to some extent, might be restored to their old status. The valuable ex-

perience of old physic for nearly twenty centuries should not be sacrificed to doubtful theories, or to inexorable

“Fashion—a word which knaves and fools may use,
Their knavery and folly to excuse.”—CHURCHILL.

It is not to be denied that we possess many additions to our materia medica, unknown to our forefathers, capable of controlling violent action of the heart and arterial system, but in many cases they should be used afterwards as valuable adjuvants to the lancet. Neither of these agents can be used with the same safety and the same decided relief to the symptoms.

It might be interesting to inquire further into the causes that gave rise to this great change in the practice of bleeding, as well as in the use of heroic doses of medicine, if our limits permitted. It may be stated, however, as more than a coincidence, that in proportion as the practice of bleeding, vomiting, purging, salivation, etc. began to subside, and placebos, expectant treatment, and stimulation became fashionable, in that proportion did the teachings of Samuel Hahnemann prevail. Although having no faith in the fanciful doctrine of “*similia similibus*,” and astounded at the unphilosophical and ridiculous proposition that *the dynamic power of medicine was magnified in proportion to its infinitesimal attenuation*, yet the regular profession was benefited by homœopathy, inasmuch as it was made more apparent than before that many diseases got well without the aid of medicine. It is a fact long known that diseases are frequently self-limited, and, if let alone, will run through their course and terminate in health. Perhaps the large majority of our ordinary ailments would recover without medication—hence the homœopathic, the placebo, and expectant treatment is followed by satisfactory results in some cases, and by very disastrous consequences in others. Dr. Bigelow says that this kind of practice “consists in leaving the case to nature, while the patient is amused with nominal and nugatory remedies.” And here arises the thought that it is the recuperative power of the system after all, to which we must look for recovery. But to place this in the most favorable condition, and offer such adjusting and modifying influences as will aid the operations of nature, must be our great aim.

I will conclude these cursory remarks on bleeding in the language of Dr. Richardson, taken from the *London Medical Times and Gazette*: “That in this, the most feebly endowed age in the whole history of physic, an age of placebo, the teachings of the fathers of our art should stand for nothing, unnatural fact as it is, is hardly

strange. Placebo gratifies fashion, which is our master ; ministers to luxurious ease of thought, which is our present weakness ; and, so long as we have no informed critics out of our ranks to find fault with our work, passes for skilful fencing, even against death. Whether an art so simplified is as safe as it is pleasant is a question I do not wish to discuss ; but of this I am certain, that in giving up bloodletting, as a means of cure, it sacrifices both skill and duty to ignorant prejudice and ignoble fear."

Although young physic has gained nothing by discarding the lancet, and failed in reaping some of the rich results of centuries of valuable experience, yet in many things the progress of medicine has placed him far in advance of his ancestors. Let me allude to some of them :—

Gynæcology, as a branch of study, was scarcely known half a century ago. The vast discoveries made in uterine pathology, and the advance in the treatment of the diseases of females, even in the lifetime of many of us, are beyond estimate. A large majority of the members of the Society can well appreciate the extent of this progress. Old physic, if he has kept pace with the course of events, will acknowledge that in the early part of his professional career, he knew little or nothing, comparatively, of the proper treatment of such diseases. He can look back and call to mind scores of patients, who went down into the grave without relief, and who could have been saved had he possessed that knowledge which the profession now claims. The proportion of female diseases, however, was no doubt much less in the earlier part of this century than it is now, because the habits of the people were much more simple and healthful than in the present day. Ladies then occupied the good old-style one and two story houses, well ventilated by wood-fires on open hearths ; wore six yards of material for a dress ; supported their garments by suspenders upon their shoulders ; did not constrict their bodies below the waist to the smallest possible wasp-like dimensions, but allowed their lungs to expand in the normal direction ; wore low-heeled-shoes to enable them to walk erect, and throw the centre of gravity on to the spinal column where it properly belongs ; walked and lived much in the open air ; rode on horseback instead of going in carriages, which are a modern luxury ; retired early to bed and arose therefore early ; did not revel most of the night in over-heated, crowded, and badly-ventilated rooms, nor slumber away the whole of the next morning in their close chambers, while the balmy fresh air outside was inviting them to its embrace. Age may have blunted my sensibilities, and

clouded my judgment, but I remember that, in the ardor of my youth, I admired the girl of that day as eminently healthful, rosy, buxom, and beautiful; and no doubt Thompson had the same lovely object in view when he wrote:—

“A native grace
Sat fair proportion'd on her polish'd limbs,
Veil'd in a simple robe, their best attire,
Beyond the pomp of dress; for loveliness
Needs not the foreign aid of ornament,
But is, when unadorn'd, adorn'd the most.”

But as time has advanced, customs have become different, and in proportion as they have departed from simplicity have the infirmities of women increased. Our dwellings have risen to three, four, and even five stories, and in like proportion have dress-patterns augmented. The amount of dry-goods required to furnish one dress now would have sufficed to clothe four or five of our good mothers when they were young women. How can we explain this singular phenomenon? Have the dimensions of our lovely sisters quadrupled, or has that remorseless goddess Fashion imposed upon the tender frame this immense weight? Look at that interesting, delicate girl, pallid and wan, struggling wearily under a weight of clothing which the strongest of our sex would not tolerate; all suspended, not upon her shoulders, but upon her necessarily constricted waist. See this beautiful pea-fowl as she drags her long trail through the tobacco-juice, the slush and mud of our dirty pavements, scraping up sticks, straws, old paper, cigar-stumps and filthy quids of tobacco, and dropping them at every crossing—and thus block after block repeating the same disgusting and injurious performance! After such a scavenger-like promenade she finally reaches home, dragged out with the heavy burden she has carried, her costly silk or satin skirts all smeared with the most offensive filth, her stockings soiled, and her limbs wet and cold! You will notice, also, gentlemen—I say gentlemen, for I am addressing you, and it is presumed the ladies do not hear me—that your patient has as much material in her mere flounces and her enormous pack-saddles (I will not mention the technical name) as would make an old-style dress, and which is so much additional useless and injurious weight. But this is not all. Let us look at the leather and prunella. Follow in the footsteps of this fair one, and examine the imprint of her shoes, the heel-mark scarcely larger than the thumb-nail, then a skip, and then again the impression of a very narrow sole. Measure her tiny track. Behold! it is only five or six inches long! What a celestial foot for so stately a maiden! Our

antipodes in the Celestial Kingdom—the heathen Chinese—could scarcely do better. Now look at this artistic shoe: you will notice several peculiarities—a heel about two inches high, shaved down almost to a point, and planted forward almost under the instep. What a commentary upon the work of the Creator! He designed the os calcis for the heel, but the worshipper of Saint Crispinus says that it is properly located under the scaphoid and cuboid bones. Nature has made the sole of the foot, at least the points of support, on the same level, but Mr. Lapstone says this is a mistake, and hence he tilts it up two inches higher behind! What is the effect? A lady's foot is crowded forward, all her toes are jammed together, and the great toe, which should be in line with the inside of the foot, is forced outwards across the other toes. Besides she is constantly walking down hill, and, indeed, in regard to health, is really going down hill all the time. If we could substitute the *anatomical* for the *fashionable* shoemaker, no such outrage on the laws of hygiene could occur.

Let us glance, for a moment, at the pathology of these dogmas of fashion. Examine a lady in full dress thus poised: high heels, and a constricted waist supporting from ten to thirty pounds of merchandise! She cannot, if she would, maintain a perfectly erect position. Look at her figure: her heels are tilted up, she is partly on tiptoe; the feet, head, and shoulders are thrown forward, and the hips must necessarily take an opposite direction to maintain the proper equilibrium. Why this is a caricature, a burlesque on female beauty! But when she stands forth as God has made her; erect in her fine proportions; with her full, finely chiselled bust; her ample waist responding naturally to every inspiration; animated by the glow of vigorous health; and clothed so as not to clog any vital function, nor hide every grace; and walks forth, as only she can walk who practically recognizes the physiology of the foot; she carries herself with true majesty; she is “a thing of beauty and a joy forever,” and we bow down in adoration to the most beautiful object in creation. Drop the plummet from her fair forehead, and the line is parallel with the axis of her body, while in the other case it falls anterior to the body, resembling the string when taut on its bow, and forms the hypotenuse of an obtuse triangle. Surely, the Venus de Medici was never chiselled from such a model!

“Old as I am, for ladies' love unfit,
The power of beauty I remember yet.”—DRYDEN.

But this is not all. Beauty and health are twin sisters. Examine these two beings under another aspect. Place your line on the

mastoid process of the one, and the plummet, as it should do, will strictly indicate the axis of the spinal column, and strike the malleolus. This, therefore, is the centre of gravity, and its force does not impinge upon a single vital organ. Make the same experiment with the other. The line of gravity will be very different: it leaves the vertebral axis, and passes through the organs of the chest, the viscera of the abdomen, and impinges upon the pelvic organs. Add to this a waist contracted and rigidly fixed. Now what must be the result? The upper wall of the thorax being an unyielding cone, and its lower border rendered incapable of expansion, the only compensation must be in the direction of the least resistance. We all know where that is. There are from twenty to forty inspirations every minute during every day of our existence, and in such a faulty attitude of the body the diaphragm is driven down by each inspiration, in the line of the centre of gravity, like the piston-rod of a pump, forcing every organ below it more or less out of place. All violent and unusual exertions of the body also act in the same direction.

Is it any wonder, therefore, that the diseases peculiar to females should have increased to so alarming an extent? And is it strange that, with all these counteracting causes, we should find these ills so difficult of cure, and, when cured, so apt to return? It is fortunate for women, amidst the follies of dress and the foibles of fashionable society, that pathology and treatment have made so much progress in uterine troubles. Were we not in advance of the knowledge of old physic, and did we possess no better means of combating the destructive influences of the times, our households would become female hospitals, and the treatment of such diseases would be an opprobrium to medicine. But do the best we can, this "patched-up" existence is but a poor substitute for that buoyancy of health and spirits which is the natural birthright of the majority of women.

I have often said to my lady patients privately, and, gentlemen, I say it to you publicly, that if the ladies of this country, instead of being travestied by milliners and mantuamakers, and enslaved by every change in the tide of fashion, would, before adopting them, submit their costumes to a committee of medical men, or better, of medical women, they would be infinitely more comfortable, would enjoy better health, more satisfactorily fulfil the duties of maternity and of marital life, and meet the requirements of every domestic and social position. We certainly would recommend no more clothing than could be carried with ease and comfort; we would suspend all garments upon the shoulders; we would not constrict the most

important part of the body, making that portion of the chest, which is naturally the most expansive, a contracted immovable *point d'appui* for every inspiration to drive down and displace the vital organs; we would have the shoe to fit the foot, not forcibly adapt the foot to the shoe; we would order the heels to be low and broad, and placed where the Almighty designed them; we would discard furs from the neck and shoulders for common use, reserving them for extraordinary occasions, and veto the use of unwieldy masses of false hair—as these portions of the body are so near the centre of circulation as to have their heat well maintained: in short, in adopting any style of dress we would do no violence to the laws of physiology and hygiene. This could always be accomplished in perfect harmony with good taste. The health of woman, which is so intimately associated with the beauty, welfare, and happiness of the whole human race, is too valuable to be sacrificed to the blind and indiscriminating tyranny of fashion.

In these remarks I mean no offensive criticism on the manners and customs of the day. I am incapable of this. As physicians, we should be the conservators of public health; and we have no legitimate right to be counted in the profession if, through any mercenary or other unworthy motive, we fail to promote it in every possible way.

Growing out of the debility and ill-health, to which our female patients are so often the victims, is the resort to tonics, stimulants, nervines, and opiates, the former to maintain their strength, and the latter to quiet their nerves. This, I regret to say, is not sufficiently discountenanced by the profession, and often degenerates into a habit which entails a lifetime of misery and distress. Tonics and stimulants can rarely, of themselves, add tone or strength to the animal system, and to regard them as nutrients, and to employ them with that view, is, to say the least, a most hazardous proceeding. There are times when they may be employed to advantage, but I apprehend that the cases requiring them are comparatively rare. Permanent strength is the result of molecular nutrition. And true nutrition is the effect of the assimilation and appropriation of wholesome food supplied to the stomach, mingled with and elaborated by pure air inhaled by the lungs, and then subjected to the recuperative and depurative processes throughout the whole body—while the great pendulum, required to keep this machinery in healthful action, is exercise both of body and mind. The functions of life require both motion and rest to maintain them in a normal condition. Constant activity will destroy them by wear and tear, while uninterrupted inertia will sooner or later paralyze

vital force. Bandage the arm in an immovable splint, and in six or eight weeks endeavor to exert its muscular power. It is gone. As with the muscular system, so with the health of all other anatomical divisions of the body—exercise, in due proportion, is essential. If then our American ladies would depend upon exercise in the open air, conjoined with simple habits, non-luxurious living, and cheerful company, more than upon tonics and stimulants, they would soon secure that vigorous state of health that would enable them, by an effort of the will, to discard that other vice of using nervines and opiates for every trifling irregularity of the nervous system. It would be cruel to deny to the suffering some mild sedative, yet the constant dependence upon such agents is weakening and demoralizing, and lowers the mind from that supreme influence over the body which is its rightful dignity. Besides there is a terrible responsibility associated with these habits on the part of mothers, which can scarcely be estimated. You will understand this when I announce the words of a prominent London physician, who says: “*the babies of London are always intoxicated from the time they are born until they are weaned.*” How far this will apply to the little innocents of America I will not pretend to say; but the enormity of the practice, if such exist, may be estimated by a reference to the decalogue, which tells us that the iniquity of the parent shall be visited upon the children unto the third and fourth generation.

Among the afflictions belonging alone to woman, perhaps the most formidable is cystic hypertrophy of the ovary. For this terrible disease nothing—absolutely nothing—was successfully attempted before the present century. Ovariectomy is cotemporaneous with many of us. For this great boon to humanity and to surgical art we are indebted to the genius and skill of our own country. In 1809, in the wilds of Kentucky, Dr. Ephraim McDowell did for woman more than any other one man ever accomplished. What Sir Astley Cooper, the greatest authority of his day, said was impossible, what his own contemporaries abroad and at home doubted and denied, was demonstrated again and again by this noble Kentuckian. The medical world was slow to acknowledge this wonderful achievement, and equally condemned the man and the measure. Like many benefactors he reaped not the reward of his own discovery. But, Phoenix-like, he has risen again from his own ashes, and his heroic operation stands in bold relief as one of the greatest (if not the greatest) triumphs of surgery. It has saved hundreds of lives doomed to inevitable death; it has substituted health,

without mutilation, for ceaseless discomfort, distress, deformity, and pain; and it has added inconceivably to the life-rate of female existence. Look around you! See monuments erected to the warrior; obelisks to the distinguished citizen; statues to the statesman;—but where is the memorial that tells the story of the modest surgeon? His memory is enshrined only in the hearts of grateful women, and written on the pages of medical history. When we contemplate the increase of human life and health, and the diminution of disease, suffering, and death through ovariotomy, retrospectively, and prospectively for ages to come, surely the name of McDowell will never die. And yet the ground on which this grand operation was accomplished is yet to be consecrated by some suitable structure to do honor to his memory!

One of the greatest contributions of a recent date to the surgical treatment of the diseases of females, I am most happy to say, was also made by an American surgeon. In the long catalogue of diseases peculiar to woman, there is none more loathsome than the one to which I now refer, but need not name. It is by no means dangerous, and yet before this brilliant operation by a young Alabama surgeon, many were the unavailing supplications of the afflicted for relief from their distressed condition that the grave would open to receive them. Excluded from society, offensive to her friends, disgusted with herself, the sensitive mother was forced to fret out a long and most miserable existence, secluded from the world, and without hope of relief. But she is again restored to her own self-respect, to her high station in society, to the fond embrace of her family and friends, and has shaken off that dreadful incubus which was pressing her to the earth. Many were the trials, and many were the failures in overcoming this dreadful injury; but there was a steadiness of purpose, an ingenuity of device, a delicate and educated hand, and all the qualities belonging to the intrepid and careful surgeon that concentrated themselves in that gifted young man. I know that I am anticipated by all in thus alluding to the well-known American surgeon—whose fame is not only national, but world-wide—J. Marion Sims.

Another wonderful discovery, originating since the days of old physic, is claimed also by America. It is true that Sir Humphry Davy was not ignorant of some of the peculiar properties of "laughing gas," and that Berzelius, in 1824, discovered that instantaneous and deep sleep was induced by the respiration of hydrogen gas, yet it was a Boston dentist to whom the world is indebted for illus-

trating the wonderful properties of ether, and the discovery of the induction of anaesthesia by the inhalation of volatile agents. The first announcement of the fact that a human body could be placed in a few moments in such a profound state of insensibility that it might be dissected for hours without consciousness, and yet live, was too astonishing for belief. Yet demonstration after demonstration of the fact electrified the whole world with astonishment and delight.

The discovery of anaesthetics is, without exception, the greatest gift that any age or any country has bestowed upon suffering humanity. They are undoubtedly very powerful agents, and should be used with great caution and care. Their administration has repeatedly caused death, sometimes under the exercise of the utmost vigilance, but more frequently, I think, for want of due caution. When, however, we consider the wide scope in the employment of anaesthetics, their indiscriminate use, and the frequency of their administration, the surprise is that so little injury is attributed to their account. Certainly no agent in the *materia medica* of equal power can be charged with more benefits and fewer sins, in proportion to the extent of its use. The mitigation of human agony is inconceivable, while the danger is comparatively small, and how much one will compensate for the other is a question for the moralist. Deaths no doubt have been attributed to their agency, of which they were not guilty, any more than sudden deaths under nervous excitement, or from disease of the heart, or embolus, occurring without them. The history of these agents shows that chloroform, which was introduced by Sir James Simpson, of Edinburgh, is the most dangerous, and that sulphuric ether is the least so of all. And yet I have used chloroform, either alone or mixed with ether, since January 12, 1848, up to the present time, without any serious result.

I need not, at this day, allude to the many applications of anaesthetics in medicine, surgery, and obstetrics. We have, however, great cause for congratulation that our means of relief are much greater and more speedy, that our operations are much more definite, deliberate, and humane, and that the depressing effects of nervous shock are much more diminished than in the days of our forefathers.

Among the more recent advances of medical science may be classed the application of instruments to diagnosis, therapeutics, pathology, and physiology.

As a means of investigation, the microscope in many cases is invaluable. In the study of minute anatomy it has been used for

centuries; but the important improvements made in the instrument during the last few years, and the multiplication of accurate observers, have extended the range of observation and been most fruitful in the discovery of many valuable facts. It aids in the detection of certain pathological conditions, and in making out a correct diagnosis. We employ it in deciding the character of abnormal growths, the intimate structure of diseased tissue, the condition of the blood, of the morbid accumulations within the body, of its unhealthy secretions and excretions, in the discovery of trichinae, bacteria, and other disease-producing organisms, as well as in the detection of cryptogamic and other organic microscopic objects. It is an essential aid in diseases of the kidneys, of the bladder, and of other organs; and is employed in the decision of several medico-legal questions. It has been advantageously brought into use by your speaker in the examination of the fluids of dropsy, and has been the means of discovering a peculiar body, pathognomonic of ovarian fluid—another American triumph—due to a member of this Association, Dr. Thomas M. Drysdale, of Philadelphia.

The clinical thermometer is another instrument that has more recently come into use in the practice of medicine. When no other means are at our command in very critical conditions of disease, this little agent will announce the approach of danger, or be the harbinger of convalescence. It is quite as valuable for prognosis as the microscope is for diagnosis. If mercurials were the great sheet-anchor of old physic in the treatment of disease, the mercurial column may be considered the rudder of young physic to enable him, at times, to steer clear of the shoals that beset his pathway.

I might, if time permitted, go on in this way and allude to various instrumental aids which belong to the more recent progress of medicine and surgery, such as the various forms of speculum, the uteroscope, the ophthalmoscope, the laryngoscope, the stethoscope, etc. etc.; the many modifications of electric, magneto-electric, and galvano-electric machines; the innumerable appliances of gum-elastic and hard rubber, including Esmarch's method; and other mechanical and surgical arrangements, which were not among the armamentarium of our worthy ancestors. The very latest of these, worthy of notice, is a new and admirable trocar invented by Dr. Simon Fitch, formerly of Portland, Maine, now of the city of New York. It is especially adapted to ovariectomy, aspiration, and transfusion, and must displace all other forms of the instrument. I used the first instrument that was made on the 14th of January

last, in a case of ovariectomy, and have employed it several times since.

If time permitted, it would be interesting to speak of the medical uses of the photograph, of the telegraph, of railroads, and of many other novelties unknown to our preceptors; the increase and distribution of medical periodicals and books; the progress of American medical literature; the advances in dentistry, in pharmacy, and in other collateral branches; the growth of medical and organic chemistry, and the change of chemical nomenclature; the surgery of the recent civil war, the national medical museum, the national medical publications, and of other subjects of interest which belong to young physic.

Thus as I proceed with my address I find subjects for discussion crowding in upon me, so that it is impossible to even name them. But we must not omit to congratulate ourselves on the organization of our Board of Charities; on the improvement of our almshouses, hospitals, and prisons; on the erection of a house of correction; and, above all, on the immense advance made in the treatment and management of the insane. To Pinel, perhaps, belongs the honor of having first stricken the chains from the maniac's limbs, and of having liberated him from the dark, damp, dirty dungeons of his prison. But to no one in this country are we more indebted for carrying out humane plans and spreading enlightened views on the subject of insanity than to our own noble and self-sacrificing countrywoman, Miss D. L. Dix. The labor, the energy, the perseverance, the intelligence exhibited by that remarkable lady can only be estimated by her success. The asylums which her influence has erected in almost every State, the amelioration of the condition of the insane, the improvements in prisons, her labors during the rebellion, and her numerous acts of benevolence and charity are her living monuments, and mark an era of the present age in American history.

The allusion to this excellent lady and to her immense influence for good naturally allures me to the consideration of an institution which may also be considered of American origin, and of recent date. I allude to the Woman's Medical College. In the days of old physic such a phenomenon as a medically educated woman was unknown, at least in this country. An ignorant, fat, fussy old woman, known as "*granny*," officiated on important occasions; and even within the present century was the principal midwife. I venture to assert that many of our most eminent men—physicians,

divines, and statesmen—entered this world having their passport *visaed* by this important official. It was not until Professors James and Dewees instructed medical practitioners of this country in their proper duties that these uneducated obstetricians began to disappear, and the midwife gradually merged into the more intelligent and more dignified accoucheur. Yet even to this day, in some sections of the country, the services of this old lady are preferred. In the management of the lying-in room, in the most trying position of woman, the substitution of an educated for an ignorant attendant has been a great advance over the past.

If uneducated women were the chief practitioners of midwifery in former days, and proved themselves competent in proportion to their knowledge, then we should hail the medically educated woman who will also fulfil her duties according to her acquirements. I know that in the opinion of many the establishment of a medical college for the education of women is of doubtful expediency, yet I view it as a work in the proper direction. It is the obvious right of woman to engage in all occupations and professions suited to her ability and her sex, and it affords me much pleasure to announce that after much opposition this society has assumed a correct position on this question. Anatomically and psycho-physiologically the sexes are different, but if we view this difference free from the influence of prejudice, self-interest, and custom, we will find that, so far as the study and practice of medicine are concerned, our organization has nothing to give it material superiority over that of our sisters. In certain branches of our art, such as the department of operative surgery, particularly in capital operations, we would doubt woman's qualifications; but in the more quiet pursuits of the profession, much can be said in favor of the peculiar qualities of woman over those of man. No doubt there are exceptional women so constituted that they would achieve even brilliant success in surgery. Even among men great surgeons are comparatively few; the majority of medical practitioners being incompetent, from various causes, to practise operative surgery. If, then, we exclude the greater achievements of surgery, which also embrace certain operations in obstetrics, is there anything peculiar in the organization of woman to interfere with her ability of becoming qualified to fulfil most other duties of the profession? Can she not treat diseases, both surgical and medical, as well as her brother practitioner? Can she not conduct an ordinary case of parturition with the same care and dexterity as the majority of medical men? Can she not with more propriety and acceptance, and with equal success, treat her own sex for that long catalogue of troubles peculiar to them?

Can she not minister to the ills and afflictions of infancy and childhood with greater gentleness and equal skill? Even in the minor operations of surgery; in many of the operations on the eye, the ear, the teeth; in the dressing of wounds, and in many other troubles, where delicate and nice manipulation is necessary, educated woman is peculiarly fitted by nature to render aid.

The literature of medicine contains some names of distinguished medical women whose teachings have instructed their medical brethren, and whose authority has been acknowledged. What woman has done women may always do. Hence the "Woman's Medical College" and the "Woman's Hospital" are developing new agencies in medicine unknown to old physic, the success or failure of which time alone can solve. Not many years will have passed by before public opinion will decide upon her position in the profession, as it does upon the qualifications of her brother. According to our abilities are we all judged, and, sooner or later, like the rising or the falling waters, we must all assume our proper level.

An apparently plausible objection—periodical disability—is often made to women engaging in the ordinary duties of a medical career. I cannot see the force of it. The ordinary functions of woman are physiological and natural as are the functions of man, and usually do not unfit them for the constant duties of life. In several countries they are the "hewers of wood and the drawers of water"—they are the real out-door laborers of all work—and they do not suspend occupation one week in four. Even in our own country there are many women who must work for a living, support a family of children, and, perhaps, a drunken, lazy husband. They are compelled to almost incessant labor without regard to time or season, sunshine or storm, during the day, and disturbed at night by the care of their little ones. And yet they are competent for the task. When in a healthy condition, this function peculiar to women does not disable them. When disease, however, invades their system, they of course become more or less disqualified—but not more so than man under similar disabilities. Their nervous and mental excitability at certain periods, it is asserted, also renders them incompetent. But I am sure that this condition is an exception to the general rule. Besides, this objection must, in the ordinary course of nature, come to an end, and by the time the mind has become well matured, the woman, so far as this is concerned, is our equal.

Of course there are many conditions of life, and many circumstances, to which I need not refer, that would make it highly improper for women to engage in the practice of medicine. They would do violence to their own nature, to their domestic relations, and to

society. But there are many other females peculiarly situated, having no marital or domestic ties, who should be considered perfectly free to enter the profession. I think it safe to say that the proportion of women of this class compared to the other is nearly as large as the proportion of men who now engage in the study compared with those who do not. Of course, the argument is not that all women should be physicians, any more than that all men should, but only those, or a portion of those, who cannot or will not engage in the ordinary domestic relations and duties of life.

The specialist, equally with the medically educated woman, was unknown to old physic, and was likewise antagonized by the general profession. But specialties in practice have grown more and more into favor. Diseases of the eye, of the ear, of the throat, of the lungs, of the heart, of the uterus, of the urinary organs, of the nervous system, of the skin, etc. etc., are concentrating into certain hands. The surgery of the bones, of deformities, of tumors, etc. etc., is seeking its most accredited place. This is particularly the case in large cities and in dense populations. It is well for the community that we have these divisions, and that there are medical men peculiarly adapted to each class of disease. Our fathers in medicine had their surgeons and their medical practitioners, both of whom occasionally acted as obstetricians, and all engaged in the general practice of medicine, so that there was no line of demarcation. But as population increased, and new and frequent discoveries were made, it was found that no one man could keep pace with the progress of medical science, and that it was physically impossible to render faithful obedience to every call, and mentally impracticable to be versed in the whole arcana of his profession. Hence young physic has necessarily merged into special branches of medicine. I think, however, a mistake is made in the education of a medical man, who engages in the study for the express purpose of devoting himself to only one branch of practice. After a proper preliminary education a young man should enter the profession determined to qualify himself thoroughly in all the elementary and practical branches of medicine, and, after graduation, should engage in the field of duty, not as a specialist, but as a general practitioner. As he will have ample time he should be prepared and willing to attend to every call; and as he becomes familiar with the clinical aspects of disease and modes of treatment; and as he tests his manual dexterity in surgery and obstetrics, opportunities will abundantly develop his proper sphere of usefulness. Then, as his duties become more and more onerous, let him, as it were, glide naturally

into those channels toward which the bent of his genius inclines, and in which his practice is most successful and most acceptable to the community. This will not take long in a dense population. Even in a sparse one the physician, as he advances in years, will be able to withdraw from those kinds of practice which are least congenial, and confine himself to that for which he is best adapted. These are the true specialists, who are welcomed by the profession, and who never miss their calling.

The American Medical Association, at its meeting in Detroit, took a proper view of this subject, when it forbade any of its members to characterize themselves as oculists, aurists, gynæcologists, etc., and advised them to call themselves *practitioners of medicine*, paying particular attention to their chosen specialty. The name of oculist, aurist, etc. implies a very narrow sphere of knowledge compared with that of Doctor of Medicine, and should not be tolerated in the profession. We should be qualified, as far as possible, in all the branches of study for the widest field of duty, and we should cultivate this field until we discover what seed is best fitted for the soil, and then reap our harvest accordingly.

I fear that my address is growing tiresome, but there is one subject to which I wish to call your attention before I conclude. It is that of medical organization. If we look back to thirty years ago, medical societies scarcely had an existence. The College of Physicians of Philadelphia, organized long anterior to that period, was the recognized authority of the country, and with that exception, I know of no permanent organization in the State. The Philadelphia County Medical Society, the Medical Society of the State of Pennsylvania, the American Medical Association, and the several county societies have originated since that day. Indeed, I was one of the originators of the three first-named associations, and also of the Lancaster County Medical Society. Before this era of medical organization the profession was all at loose ends; and we older men alone can estimate the revolution that has followed combined action and frequent social and professional intercommunication. Previously, no acknowledged code of ethics regulated the intercourse of one physician with another, and no medical authority exercised censorship over unruly members of the profession. The moral law, on which our code is based, and which should govern all human actions, was not unfrequently violated with impunity. It would, perhaps, be an exaggeration to say that nearly every district was a professional bear-garden, wherein physicians were constantly growling at each other; yet I am certainly within bounds

in asserting that it was not uncommon for one to attempt to elevate himself at the expense of his medical brother. Even in the city of brotherly love, the centre of medical lore, where dwelt our venerated *almæ matres*, history will amply show how much professional rancor marked the great lights of the fraternity half a century ago. What is the case now? Look around you, and behold the genial influences that surround us: the choice members of the profession, representing active medical societies in every portion of our State, and honorable delegates from other State associations, are here assembled for a high and noble purpose. We hail you as the fitting representatives of a progressive, enlightened, and liberal profession, whose members jealously sustain our beautiful code, and are governed by the highest sense of honor, whose great aim is the advancement of science, and the promotion of every system of benevolence and humanity, who endeavor to eschew all feeling of personal animosity and envy, and to avoid all personal obloquy and defamation, who are ready to appreciate and acknowledge the honest advancement and honorable fame of a professional brother, and finally, who endeavor to carry out that golden rule of doing unto others as they would that others should do unto them. I assure you, gentlemen, when I contrast the present with the past, I feel a just sense of pride in our elevated position, and of gratitude to those agencies which have contributed to these results.

As outgrowths of the organization of medical societies I will merely allude to the promulgation of wholesome laws enacted for the regulation of the practice of medicine, surgery, and obstetrics; the improvement in the standing of the medical officers of the army and navy; the establishment of National and State boards of health; and many other organized efforts for the advancement of medical science and the promotion of public health.

Here and there, scattered among the numerous bright, intelligent, and more youthful faces of my audience, I see some venerable and respectful representatives of the days of old physic, who in their early manhood, isolated and alone, were forced to trudge along, year in and year out, communing only with their own thoughts, and having no opportunity of periodically greeting their professional brethren, even of their own vicinity. Those men of silvered locks and well-stored brains, few though they are, command our reverence and respect. Like particles of leaven whose influence leaveneth the whole mass, they furnish an example, in still maintaining their professional status, that must stimulate young physic to still higher aims and nobler purposes. They bring with them their ripe experi-

ence, their years of close observation, their matured judgment, and the mellowing influence of old age—to mingle with their professional descendants, to restrain the too ardent aspirations of youth, to warn them against the quicksands of life, and to guide them in the pathways leading to honorable distinction and fame.

On the other hand, I see around these older lights of the profession, many gentlemen of youthful ardor, of manly vigor, and others of more mature age, all bringing in new offerings and discoveries to present them to their fathers in medicine, as contributions which the progress of medicine has developed. Thus old physic and young meet together in professional harmony and love, one bringing “apples of gold in pictures of silver,” the ripe fruit of autumn, and the other bouquets of the fragrant flowers of spring!

“The spring, like youth, fresh blossoms doth produce,
But autumn makes them ripe, and fit for use :
So age a mature mellowness doth set
On the green promises of youthful heat.”—DENHAM.

In concluding these desultory remarks on the mutations, the contrasts, and progress in medicine, I would add that young physic should ever respect and venerate his fathers in the profession for the valuable stores they have handed down to posterity. They have bequeathed to us well-filled granaries of clinical facts—the results of ages of observation and experience—and their records of the natural history and treatment of disease cannot be excelled even in the present day. It is true that modern pathology and minute anatomy have made wonderful advances, but it is equally true that their investigations are mainly confined to dead matter, after disease has done its destructive work. Their great field of inquiry is in the dissecting-room and laboratory, and they may not throw true light upon either normal or abnormal vital action. But the great mass of facts recorded by old physic, century after century, in reference to the symptoms and treatment of disease, furnish valuable diagnostic and therapeutic tests of the nature of morbid action on living matter. These tests, which pathology alone cannot appreciate, will continue to furnish practical lessons to the present and future generations so long as medical science exists. That force, which, when united with inert matter, constitutes life, is as yet a mystery, which neither the physiologist, the histologist, the anatomist, the chemist, nor the pathologist has unravelled; and hence when the functions of living matter are disordered we should not pin our faith, alone or too strongly, to the discoveries of modern

pathology, but we should also cull from the dusty pages on our shelves the treasures there stored by our forefathers. Ancient sculpture has only been imitated, never surpassed; so old physic has never been excelled in his description of the natural history of disease. Let us then, with all our vaunted achievements of the present day, not forget the solid foundation of the past upon which the science of medicine has been erected; neither should we forget that—

"New occasions teach new duties; time makes ancient good uncouth;

They must upward still and onward, who would keep abreast with truth."

JAMES RUSSELL LOWELL.